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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,997	10/02/2003	Hiroyuki Maruyama	00862.023265	7794

5514 7590 05/16/2005

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EXAMINER	
KIM, PETER B	

ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,997	MARUYAMA, HIROYUKI	
	Examiner	Art Unit	
	Peter B. Kim	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *102003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

IDS filed November 2003 does not have the complete document number. After the four digits for the year, 2002, seven digits not six digits are needed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emoto (2001/0055102) in view of Nishi (6,765,647).

Emoto discloses a device manufacturing apparatus which has a plurality of objects to be temperature-adjusted (Fig. 1, linear motor – ref. 7, 8 and Fig. 8, wafer – ref 51), comprising a plurality of temperature adjustment systems which respectively temperature-adjust the plurality of objects to be temperature-adjusted, wherein said plurality of temperature adjustment systems include a first temperature adjustment system (13, 17, 18) which uses any one coolant selected from the group consisting of pure water, a fluorine-based inert solution, a gas, and an antifreeze (water, para 0007), and a second temperature adjustment system (72, 74) which uses any one coolant which is selected from the group consisting of pure water, a fluorine based inert solution, a gas, and an antifreeze. Emoto also discloses the first temperature system constituted by a closed path (Fig. 1) and the first and second temperature adjustment system arranged to operate independently (abstract and para 0140, 0141). Emoto also discloses a temperature

detection section (15) and a temperature controller (13) which control the temperature of the coolant. Emoto also discloses an exposure apparatus (Fig. 8) including a projection system (54), and a stage device (53) and the first temperature adjust system for the driving section (Fig. 1). Emoto discloses the device manufacturing method comprising step of transferring pattern onto substrate and processing the substrate (Fig. 12 and 13).

However, Emoto does not disclose that the first and second temperature adjustment system use different coolant and the second temperature adjustment system for projection system. Nishi discloses a temperature adjustment unit that uses fluorine based inert solution (col. 42, lines 1-8) is used to control temperature of the wafer and the projection system (Fig. 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the temperature adjustment unit of Nishi in order to blow the temperature controlled gas directly onto the wafer as taught by Nishi in col. 40, lines 6-43.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emoto in view of Nishi as applied to claim 1 above, and further in view of Hagiwara (6,437,851).

The further difference between the claimed invention and the modified Emoto is impurity removing unit which removed impurity in pure water and the third temperature adjustment system for air that circulates through exposure section. Hagiwara discloses the temperature adjustment system for the air that circulates through exposure section (abstract and fig. 1) and impurity removing unit (col. 10, lines 19-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further provide the temperature adjustment

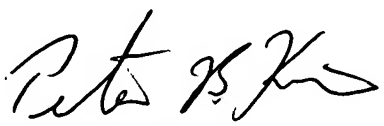
system of Hagiwara to the invention of Emoto in order to prevent impurities and to maintain temperature in the exposure system as taught by Hagiwara in col. 3, lines 28-35.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Peter B. Kim
Primary Examiner
Art Unit 2851

May 11, 2005